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MERED, HABTE	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/706,724	RAMPRASHAD, SEAN ANTHONY	
	Examiner	Art Unit	
	HABTE MERED	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 February 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4-15,17-27,29-32 and 35-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4-15,17-27,29-32 and 35-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11/12/03* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on 2/15/08 has been entered and fully considered.

Claims 1, 2, 4-15, 17-27, 29-32, and 35-38. Claims 1, 14, 26, and 31 are the base independent claims and claims 35-38 are new.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. **Claims 1, 2, 4, 10, 11, 14, 15, 17, 23, 26, 27, 29, 31, 32, and 35-38** are rejected under 35 U.S.C. 102(e) as being anticipated by Ngo (US 6, 798, 838 B1).

Regarding **claim 1**, Ngo'838 discloses a method of processing data streams in a contention-based WLAN system **(Ngo'838 states in Column 5, Lines 4-12 that the network shown in Figure 1 is an IEEE802.11 compliant WLAN)**, the method comprising:

(A) generating two or more sub-streams corresponding to a first data stream **(in Figure 2, Ngo'838 shows for the input video that corresponds to a first data stream and the output of the layered source encoder generates at least 4 sub-streams in Figure 2)**, wherein the two or more sub-streams comprise a base sub-stream and at least one enhancement sub- stream **(In Ngo'838's Figure 2, output of element 211 is a base sub-stream and output of elements 212..214 generate N enhancement sub-streams)**;

(B) assigning priority to each of the two or more sub-streams, wherein at least two of the base and enhancement sub-streams have different priorities **(Ngo'838 in Column 5, Lines 50-55 unequivocally states that the base layer and the enhancement layers are assigned priorities and the priorities are distinct)**; and

(C) transmitting data corresponding to each of the two or more sub-streams based on the assigned priority **(Ngo'838 shows in Column 6, Lines 9-15 that the transmitter controller 240 in Figure 2 uses the transport priority settings 250 shown in Figure 2 to transmit data from each sub-stream)**.

Regarding **claim 2**, Ngo'838 discloses a method wherein the contention-based WLAN system conforms to an IEEE 802.11 standard **(Ngo'838 states in Column 5, Lines 4-12 that the network shown in Figure 1 is an IEEE802.11 compliant WLAN)** and supports a quality of service (QoS) facility **(Figure 2, element 250 is a QoS facility in the stations and its principle of operation is shown in Column 6, Lines 47-67)**.

Regarding **claim 4**, Ngo'838 discloses a method wherein the first data stream **(See Figure 2, input video stream)** is a hierarchical stream and step (A) comprises partitioning the hierarchical stream based on the hierarchy of the stream to produce the two or more sub-streams **(In Ngo'838's Figure 2, output of element 211 is a base sub-stream and output of elements 212..214 generate N enhancement sub-streams and Ngo'838 explains the hierarchy of the sub-streams in Column 1, Lines 30-40)**.

Regarding **claim 10**, Ngo'838 discloses a method wherein step (B) comprises, for each of the two or more sub-streams, selecting parameters **(Ngo'838 shows the**

parameters in Table II) of a corresponding QoS parameter set **(In Column 6, Lines 48-67 and Table II Ngo'838 shows selecting different QoS parameter set for different sub-streams or layers)**.

Regarding **claim 11**, Ngo'838 discloses a method wherein further comprising: (D) generating two or more sub-streams **(Figure 3, elements 331 to 334 are sub-streams generated from the received signal 310)** corresponding to the transmitted data **(Figure 3, signal 310 is the transmitted signal received by the receiver 305)**; and (E) processing the sub-streams of step (D) to generate an output data stream corresponding to the first data stream **(the received signal 310 of Figure 3 corresponds to the output of the transmitter 230/235 in Figure 2 which in turn corresponds to the input video of Figure 2 which was identified as the first data stream in claim 1. See Ngo'838 Column 7, Lines 30-67 for detailed explanation)**.

Regarding **claim 14**, Ngo'838 discloses at a transmitting station **(Figure 2 shows a transmitting station)** in a contention-based WLAN system **(Ngo'838 states in Column 5, Lines 4-12 that the network shown in Figure 1 is an IEEE802.11 compliant WLAN)**, apparatus adopted to process data streams, the apparatus comprising :

(A) a device **(Figure 2, element 230 layered source encoder)** adopted to generate two or more sub-streams corresponding to a first data stream **(in Figure 2, Ngo'838 shows for the input video that corresponds to a first data stream and the output of the layered source encoder generates at least 4 sub-streams in Figure 2)**, wherein the two or more sub-streams comprise a base sub-stream and at least one

enhancement sub- stream **(In Ngo'838's Figure 2, output of element 211 is a base sub-stream and output of elements 212..214 generate N enhancement sub-streams)**;

(B) a controller **(Figure 2, element 240)** coupled to the transmitter **(Figure 2, elements 230 and 235)**, wherein the transmitter is adopted to transmit data corresponding to the two or more sub-streams **(see output of mux 220 feeding into transmitter 230/235 in Figure 2)** and the controller is adopted to (i) assign priority to each of the two or more sub-streams, wherein at least two of the base and enhancement sub-streams have different priorities **(Ngo'838 in Column 5, Lines 50-55 unequivocally states that the base layer and the enhancement layers are assigned priorities and the priorities are distinct)**; and (ii) apply sub-stream data to the transmitter based on the assigned priority **(Ngo'838 shows in Column 6, Lines 9-15 that the transmitter controller 240 in Figure 2 uses the transport priority settings 250 shown in Figure 2 to transmit data from each sub-stream)**.

Regarding **claim 15**, it is noted that the limitations of claim 15 corresponds to that of claim 2 as discussed above, please see the Examiner's comments with respect to claim 2 as set forth in the rejection above.

Regarding **claim 17**, it is noted that the limitations of claim 17 corresponds to that of claim 4 as discussed above, please see the Examiner's comments with respect to claim 4 as set forth in the rejection above.

Regarding **claim 23**, it is noted that the limitations of claim 23 corresponds to that of claim 10 as discussed above, please see the Examiner's comments with respect to claim 10 as set forth in the rejection above.

Regarding **claim 26**, Ngo'838 discloses at a receiving station **(Figure 3 depicts a receiving station)** in a contention-based WLAN system **(Ngo'838 states in Column 5, Lines 4-12 that the network shown in Figure 1 is an IEEE802.11 compliant WLAN)**, apparatus adapted to generate an output data stream **(See Figure 3, output video signal)** corresponding to a first data stream **(the received signal 310 of Figure 3 corresponds to the output of the transmitter 230/235 in Figure 2 which in turn corresponds to the input video of Figure 2 which was identified as the first data stream in claim 1. See Ngo'838 Column 7, Lines 30-67 for detailed explanation)**.applied to a transmitting station in the system, the apparatus comprising:

(A) a processor **(Demux 320 of Figure 3 is coupled to the receiver 310)** coupled to a receiver, the processor adapted to generate two or more sub-streams corresponding to data received by the receiver from the transmitting station **(outputs from the demux 320 constitute the sub-streams heading into the decoders)**; and

(B) a first device **(the first device is the layered source decoder 330 of Figure 3)** coupled to the processor and adapted to process the two or more sub-streams generated by the processor **(the demux 320 generates the sub-streams feeding into the N layered decoders)** to generate the output data stream, wherein the transmitting station **(The transmitting station is represented by Figure 2 in Ngo'838 system)** comprises:

(i) a second device **(Layered Source Encoder 210 in figure 2)** adapted to generate two or more sub-streams corresponding to the first data stream **(input video stream of figure 2 is the first stream)**, wherein the two or more sub-streams corresponding to the first data stream comprise a base sub-stream **(output of base layer encoder in figure 2)** and at least one enhancement sub-stream (outputs of the N enhancement layer encoders); and

(ii) a controller **(Figure 2, element 240)** coupled to a transmitter **(Figure 2, elements 230,235)**, wherein: the transmitter is adapted to transmit data corresponding to the two or more sub-streams generated by the second device **(see output of mux 220 feeding into transmitter 230/235 in Figure 2)**; and

the controller is adapted to

(i) assign priority to each of the two or more sub-streams generated by the second device, wherein at least two of the base and enhancement sub-streams have different priorities **(Ngo'838 in Column 5, Lines 50-55 unequivocally states that the base layer and the enhancement layers are assigned priorities and the priorities are distinct)** and

(ii) apply sub-stream data to the transmitter based on the assigned priority **(Ngo'838 shows in Column 6, Lines 9-15 that the transmitter controller 240 in Figure 2 uses the transport priority settings 250 shown in Figure 2 to transmit data from each sub-stream)**.

Regarding **claim 27**, it is noted that the limitations of claim 27 corresponds to that of claim 2 as discussed above, please see the Examiner's comments with respect to claim 2 as set forth in the rejection above.

Regarding **claim 29**, Ngo'838 discloses an apparatus, wherein the first and output data streams are hierarchical streams are hierarchical streams **(Figure 2 shows the first data stream as the input video and is converted by the encoder into a hierarchical layered signal and Figure 3 shows an output video signal generated by the decoder from many hierarchical layered signals)** ;
the second device **(Receiver of figure 3)** comprises a partitioner **(demux 320 of figure 3)** adapted to generate, using scalable coding **(the encoder of figure 2 uses layered coding which is scalable coding)**, the two or more sub-streams generated by the second device **(Receiver in Figure 3)**; and the first device **(Transmitter in Figure 2)** comprises a reconstructor **(Mux 220 of Figure 2)** adapted to combine the two or more sub-streams **(outputs of layered source encoder 210 and input of mux 220 in figure 2)** generated by the processor to produce the output data stream **(output of mux 220 in Figure 2)**.

Regarding **claim 31**, Ngo'838 discloses a contention-based WLAN system **(Ngo'838 states in Column 5, Lines 4-12 that the network shown in Figure 1 is an IEEE802.11 compliant WLAN)**, comprising a transmitting station **(Figure 2)** and a receiving station **(Figure 3)**, wherein:

the transmitting station is adapted to: generate two or more sub-streams **(outputs of Layered Source Encoder 210 are sub-streams, figure 2)** corresponding

to a first data stream **(incoming input video, figure 2)**, wherein the two or more sub-streams corresponding to the first data stream comprise a base sub-stream **(output of base layer encoder 211, figure 2)** and at least one enhancement sub-stream **(output of N enhancement Layer encoders, figure 2)**; assign priority to each of the two or more sub-streams corresponding to the first data stream, wherein at least two of the base and enhancement sub-streams corresponding to the first data stream have different priorities **(Ngo'838 in Column 5, Lines 50-55 unequivocally states that the base layer and the enhancement layers are assigned priorities and the priorities are distinct)**; and transmit data corresponding to the two or more sub-streams corresponding to the first data stream based on the assigned priority **(Ngo'838 shows in Column 6, Lines 9-15 that the transmitter controller 240 in Figure 2 uses the transport priority settings 250 shown in Figure 2 to transmit data from each sub-stream)**; and

the receiving station **(Figure 3)** is adapted to: generate two or more sub-streams **(outputs of Demux 320 in figure 3)** corresponding to data received from the transmitting station **(output of receiver 310 in figure 3)**; and process the two or more generated sub-streams to generate an output data stream **(output video signal in Figure 3)** corresponding to the first data stream **(input video of Figure 2)**.

Regarding **claim 32**, it is noted that the limitations of claim 32 corresponds to that of claim 2 as discussed above, please see the Examiner's comments with respect to claim 2 as set forth in the rejection above.

Regarding **claim 35**, Ngo'838 discloses a system wherein the base sub-stream is adopted to be decoded independently; and each of the enhancement sub-streams is adopted to be decoded based on data contained in the base sub-stream **(This limitation is fundamental to layered or scalable source coding and is not unique to Applicant's invention. Ngo'838 teaches in Column 1, lines 30-40 that the base sub-stream can be decoded by itself and can be of acceptable quality. However Ngo'838 indicates that the enhanced sub-streams make the base sub-stream a better quality video when the enhancement signals are decoded and multiplexed with the base stream to get a meaningful signal as stated in Column 7, lines 59-62. The enhancement sub-streams without the base sub-stream are meaningless from the perspective of obtaining the original signal.).**

Regarding **claim 36,** it is noted that the limitations of claim 36 corresponds to that of claim 35 as discussed above, please see the Examiner's comments with respect to claim 35 as set forth in the rejection above.

Regarding **claim 37,** it is noted that the limitations of claim 37 corresponds to that of claim 35 as discussed above, please see the Examiner's comments with respect to claim 35 as set forth in the rejection above.

Regarding **claim 38,** it is noted that the limitations of claim 38 corresponds to that of claim 35 as discussed above, please see the Examiner's comments with respect to claim 35 as set forth in the rejection above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 5, 18, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo'838 in view of Chaddha et al (US 5, 768, 535).

Regarding **claim 5**, Ngo'838 fails to expressly disclose a method wherein the first data stream is an embedded stream and step (A) comprises generating the two or more sub-streams using an embedded encoder **(*Note that in the unpublished specification on page 7 in Line 34 that it is stated that a video stream is an embedded stream and in Ngo'838's Figures 2 and 3 it shows video stream entering and exiting the station*)**.

However, the above mentioned claimed limitations are well known in the art as evidenced by Chaddha'535. In particular, Chaddha'535 discloses a method wherein the first data stream is an embedded stream **(Figure 1, element 10 is the source and output of element 60 is an embedded stream as illustrated in Column 4, Lines 1-15)** and step (A) comprises generating the two or more sub-streams using an embedded encoder **(Figure 1, element 60 is a scalable video encoder and should be noted that in the unpublished version of the specification on page 7 in line 36 that the Applicant readily admits that a scalable video encoder is the same as embedded encoder. Further Chaddha'535 discloses in Column 5, Lines 13-22 that**

the encoder 60 of Figure 1 creates a base layer and enhancements layers generating the sub-streams required).

In view of the above, having the method of Ngo'838 and then given the well established teaching of Chaddha'535, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method of Ngo'838 as taught by Chaddha'535, since Chaddha'535 clearly states in Column 4, Lines 42-55 that use of a scalable video encoder allows hosting different decoders having various spatial and temporal resolutions.

Regarding **claim 18**, it is noted that the limitations of claim 18 corresponds to that of claim 5 as discussed above, please see the Examiner's comments with respect to claim 5 as set forth in the rejection above.

Regarding **claim 30**, Ngo'838 fails to expressly disclose wherein:
the first and output data streams are embedded streams; the second device comprises an embedded encoder adapted to generate the two or more sub-streams generated by the second device; and the first device comprises an embedded decoder adapted to process the two or more sub-streams generated by the processor to produce the output data stream. (***Note that in the unpublished specification on page 7 in Line 34 that it is stated that a video stream is an embedded stream and in Ngo'838's Figures 2 and 3 it shows video stream entering and exiting the station***).

However, the above mentioned claimed limitations are well known in the art as evidenced by Chaddha'535. In particular, Chaddha'535 discloses an apparatus wherein: the first and output data streams are embedded streams **(Figure 1, element**

10 is the source and output of element 60 is an embedded stream as illustrated in Column 4, Lines 1-15 and in Figure 3 the output of the receiver/decoder is shown as video a form of embedded stream); the second device **(Server in Figure 1 has the embedded/scalable video encoder 60 and output of element 60 is an embedded stream as illustrated in Column 4, Lines 1-15)** comprises an embedded encoder adapted to generate the two or more sub-streams generated by the second device **(output of element 60 is an embedded stream as illustrated in Column 4, Lines 1-15 and the sub-streams are shown in figure 2)**; and the first device comprises an embedded decoder **(Figure 1, element 40 is embedded decoder as illustrated in Column 8, Lines 28-67)** is the decoder adapted to process the two or more sub-streams generated by the processor **(Figure 1, element 145)** to produce the output data stream **(Figure 3, elements 480, 490, and 550 are the different output data stream at different resolution)**. I

In view of the above, having the apparatus of Ngo'838 and then given the well established teaching of Chaddha'535, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the apparatus of Ngo'838 as taught by Chaddha'535, since Chaddha'535 clearly states in Column 4, Lines 42-55 that use of a scalable video encoder allows hosting different decoders having various spatial and temporal resolutions.

Claims 6, 12, 13, 19, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo'838 in view of Eshet et al (US 7, 116, 717 B1).

Regarding **claim 6**, Ngo'838 fails to disclose a method further comprising, for each sub-stream, accumulating data corresponding to the sub-stream in a corresponding transmission queue.

However, the above mentioned claimed limitations are well known in the art as evidenced by Eshet'717. In particular, Eshet'717 discloses a method further comprising, for each sub-stream **(Eshet'717 shows in Figure 8, element 70 sub-streams generator and generates a base layer, Layer 1, and k enhancement layers)**, accumulating data corresponding to the sub-stream **(For each sub-stream k there is a corresponding transmission queue 60_k)** in a corresponding transmission queue **(See Eshet'717 in Column 22, Lines 6-18 and 25-30 states the limitation verbatim)**.

In view of the above, having the method of Ngo'838 and then given the well established teaching of Eshet'717, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method of Ngo'838 as taught by Eshet'717, since Eshet'717 clearly states in Column 1, Lines 45-62 that the modification results in providing a system and method for efficiently reconstructing a media stream from various representations of the media stream.

Regarding **claim 12**, Ngo'838 fails to disclose a method further comprising: generating two or more sub-streams corresponding to a second data stream, wherein the two or more sub-streams corresponding to the second data stream comprise a corresponding base sub-stream and at least one corresponding enhancement sub-stream: assigning priority to each of said sub-streams corresponding to the second data

stream; and for each of the two or more sub-streams corresponding to the first data stream and the two or more sub-streams corresponding to the second data stream, accumulating data corresponding to the sub-stream in a corresponding transmission queue, wherein at least one of the transmission queues receives sub-stream data corresponding to each of the first and second data streams.

However, the above mentioned claimed limitations are well known in the art as evidenced by Eshet'717. In particular, Eshet'717 discloses a method further comprising: generating two or more sub-streams corresponding to a second data stream **(Eshet'717 in Figure 13A media streams A & B as the first and second data streams respectively)**, wherein the two or more sub-streams corresponding to the second data stream **(Eshet'717 shows in Figure 13B media stream B which is the second data stream being partitioned into four sub-streams)** comprise a corresponding base sub-stream **(Figure 13B shows Q=20 as the base sub-stream)** and at least one corresponding enhancement sub-stream **(Figure 13B shows three enhancement streams, Q=10, Q=5, and Q=1)**; assigning priority to each of said sub-streams corresponding to the second data stream **(In Figure 13B all sub-streams have a Q value which is a quantization value and is a form of QoS parameter in Column 24, Lines 40-45)**; and for each of the two or more sub-streams corresponding to the first data stream and the two or more sub-streams corresponding to the second data stream, accumulating data corresponding to the sub-stream in a corresponding transmission queue **(In Figure 13A-D Queues 210, 212, 214, and 216 accumulate data belonging to a specific sub-stream)**, wherein at least one of the transmission

queues receives sub-stream data corresponding to each of the first and second data streams **(In Figures 13A-D, sub-streams from media streams A-C..M are stored in queues 210, 212, 214, and 216. For further details see Column 25, Lines 44-67 and Column 26, Lines 1-28)**.

In view of the above, having the method of Ngo'838 and then given the well established teaching of Eshet'717, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method of Ngo'838 as taught by Eshet'717, since Eshet'717 clearly states in Column 1, Lines 45-62 that the modification results in providing a system and method for efficiently reconstructing a media stream from various representations of the media stream.

Regarding **claim 13**, the combination of Ngo'838 and Eshet'717 discloses a method wherein at least one sub-stream corresponding to the first data stream and at least one sub-stream corresponding to the second data stream have the same priority **(In Eshet'717's system as shown in Figure 8, queues $60_1 \ldots 60_k$ have specific priorities ranging from P1 to PK as further illustrated in Column 25, Lines 25-30. hence the sub-streams from the different data streams in the different queues 210-124 and 216 have the same priority)** .

Regarding **claim 19**, it is noted that the limitations of claim 19 corresponds to that of claim 6 as discussed above, please see the Examiner's comments with respect to claim 6 as set forth in the rejection above.

Regarding **claim 24**, it is noted that the limitations of claim 24 corresponds to that of claim 12 as discussed above, please see the Examiner's comments with respect to claim 12 as set forth in the rejection above.

Regarding **claim 25**, it is noted that the limitations of claim 25 corresponds to that of claim 13 as discussed above, please see the Examiner's comments with respect to claim 13 as set forth in the rejection above.

Claims 7, 9 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo'838 in view of Eshet'717 as applied to claims 6 and 19 above, and further in view of Balachandran et al (US 7, 194, 000 B2).

Regarding **claim 7**, the combination of Ngo'838 and Eshet'717 fails to expressly disclose a method, further comprising, for each queued data packet, (i) running a timer having a threshold value and (ii) discarding the data packet without transmission, when the timer reaches the threshold value.

However, the above mentioned claimed limitations are well known in the art as evidenced by Balachandran'000. In particular, Balachandran'000 discloses a method further comprising, for each queued data packet **(Balachandran'000 discloses queues 140, 140', and 140'' in Figure 2 and each queue have unique priority as illustrated in Column 5, Lines 10—28)**, (i) running a timer having a threshold value **(Balachandran'000 in Column 8, Lines 47-50 and Column 9, Lines 8-12 and Figure 6, step 502 shows for each priority there is a unique timer and Balachandran'000 reiterates the same fact in Column 10, Lines 27-33 that each packet in the prioritized transmission queues 140, 140', and 140'' of Figure 2 has a unique timer**

T1. Every timer's set value to expire is a threshold) and (ii) discarding the data packet without transmission, when the timer reaches the threshold value **(Balachandran'000 shows in Column 9, Lines 26-32 and Column 10, Lines 14-20 that when Timer T1 reaches its threshold, i.e. when the timer expires, the packet is dropped signified by its removal from register S_i. See Figure 7, steps 610 and 612 also)**.

In view of the above, having the method based on the combination of Ngo'838 and Eshet'717 and then given the well established teaching of Balachandran'000, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method based on the combination of Ngo'838 and Eshet'717 as taught by Balachandran'000, since Balachandran'000 clearly states in Column 1, Lines 50-54 and Column 2, Lines 1-34 that the modification allows a quick and less complicated system for compensating changes in the wireless communication channel so as to guarantee the quality of service of the transmission.

Regarding **claim 9**, the combination of Ngo'838 and Eshet'717 and Balachandran'000 discloses a method wherein timers corresponding to different queues have different threshold values. (**Balachandran'000 in Column 8, Lines 47-50 and Column 9, Lines 8-12 and Figure 6, step 502 shows for each priority there is a unique timer and Balachandran'000 reiterates the same fact in Column 10, Lines 27-33 that each packet in the prioritized transmission queues 140, 140', and 140'' of Figure 2 has a unique timer T1. Every timer's set value to expire is different**

resulting in different thresholds for different timers associated with the differently prioritized queues).

Regarding **claim 20**, it is noted that the limitations of claim 20 corresponds to that of claim 7 as discussed above, please see the Examiner's comments with respect to claim 7 as set forth in the rejection above.

Regarding **claim 22**, it is noted that the limitations of claim 22 corresponds to that of claim 9 as discussed above, please see the Examiner's comments with respect to claim 9 as set forth in the rejection above.

Claim 8 and 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ngo'838 in view of Eshet'717 and Balachandran'000 as applied to claims 7 and 20 respectively above, and further in view of Li et al (US 6, 898, 313 B2).

Regarding **claim 8**, the combination of Ngo'838, Eshet'717 and Balachandran'000 fails to expressly disclose wherein, for each enhancement packet, the timer starts when a corresponding base packet is transmitted. **(Since Balachandran'000 discloses each queue has a unique timer and priority and the timer is set when the packet is released for transmission, indeed it teaches the limitation indirectly)**

However, the above mentioned claimed limitations are well known in the art as evidenced by Li'313. In particular, Li'313 discloses a method wherein, for each enhancement packet, the timer starts when a corresponding base packet is transmitted (**In Column 4, Lines 3-10 and 19-21 Li'313 discloses that scheduler 30 of Figure 1 transmits a base packet and continues to send enhancement packets up to a**

timer expires and the timer expires at some maximum time threshold and the timer is set or the maximum time is counted from the point the base layer packet is sent.).

In view of the above, having the method based on the combination of Ngo'838, Eshet'717, and Balachandran'000 and then given the well established teaching of Li'313, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the method based on the combination of Ngo'838, Eshet'717, and Balachandran'000 as taught by Li'313, since Li'313 clearly states in Column 1, Lines 50-60 and Column 2, 48-55 that the modification results in a scalable data coding system that produces good quality with less complicated coding operation and uses less computing power.

Regarding **claim 21**, it is noted that the limitations of claim 21 corresponds to that of claim 8 as discussed above, please see the Examiner's comments with respect to claim 8 as set forth in the rejection above.

Response to Arguments

4. Applicant's arguments with respect to all amended independent claims have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments on previously raised claim objections regarding use of the phrase "adapted to" for instance in claim 14 and use of the phrase "capable of" in the cancelled claim 33 has been noted and consequently the claim objections are withdrawn.

However, Examiner wants to caution Applicant that use of phrases like "adapted to" in a claim body, according to the MPEP chapter 2106, Section II, Part C, lacks positive recitation because they only suggest or make optional but do not require steps to be performed or does not limit a claim to a particular structure and does not limit the scope of the claim and consequently the claim will be examined in the broadest reasonable interpretation in light of the support found in the specification.

Specifically MPEP chapter 2106, Section II, Part C, states "…*USPTO personnel are to correlate each claim limitation to all portions of the disclosure that describe the claim limitation. This is to be done in all cases, regardless of whether the claimed invention is defined using means or step plus function language. The correlation step will ensure that USPTO personnel correctly interpret each claim limitation. The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope.* ***Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.*** *The following are examples of language that may raise a question as to the limiting effect of the language in a claim:*

(A) statements of intended use or field of use,

*(B) "**adapted to" or "adapted for" clauses,***

(C) "wherein" clauses, or

(D) "whereby" clauses.

This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure...."

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HABTE MERED whose telephone number is (571)272-6046. The examiner can normally be reached on Monday to Friday 9:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on 571 272 7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aung S. Moe/
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